Stanislaus County
Striving to be the Best

DEPARTMENT OF ENVIRONMENTAL RESOURCES
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Bill Brattain **VIA FAX AND EMAIL, 5/2/08, followed by USPS**
Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Dr. #200
Rancho Cordova, CA 95670

RE: COMMENTS ON TENTATIVE REVISED WASTE DISCHARGE REQUIREMENTS, FINK ROAD LANDFILL

Dear Mr. Brattain:

Thank you for the opportunity to comment on the *Tentative Waste Discharge Requirements for Stanislaus County Department of Environmental Resources for Operation of the Fink Road Class II and Class III Landfill and Class II Surface Impoundments, Stanislaus County.* As the Discharger responsible for this facility and for compliance with all applicable agency requirements and orders, we hope the RWQCB will accept the following comments so that the proposed Order is both correct and has attainable requirements and deadlines. The comments are listed by either Waste Discharge Requirements (WDRs) or Monitoring and Reporting Program (MRP) and the applicable section and paragraph, along with recommendations for modification of the paragraphs.

WDR Findings ¶ 7: This paragraph provides the stated intent of the proposed Order as, "This Order revises the WDRs to allow disposal of treated wood waste (TWW) in composite-lined Cell 4 of LF-2, and future Cells 5, 6 and 7 of LF-2." We thank the RWQCB for their cooperation in issuing this Order for that purpose and we agree with all requirements in the Order related to the handling and disposal of TWW. However, the proposed Order goes well beyond the stated intent of the Order by adding additional requirements and deadlines for groundwater investigations and related reports.

Recommendation: If the Order will contain additional requirements for studies and reports not included in the current WDRs, then that intent should also be stated in this paragraph.

WDR Findings ¶ 4 (and globally thereafter): The name of the operator of the waste-to- energy facility at the site has changed.

Recommendation: Remove all references to Ogden Martin Systems of Stanislaus (OMSS) and Covanta Energy and replace with "Covanta Stanislaus, Inc."

WDR Groundwater Monitoring ¶ 39: This paragraph correctly states that a new Water Quality Protection Standard Report was submitted to RWQCB on March 15, 2007, and a letter containing RWQCB comments was issued December 6, 2007. Also, information was provided to RWQCB by February 29, 2008, as required, to help justify the approach to determining new concentration limits. No response has been received from RWQCB on this communication and these Tentative Orders are our first notification that RWQCB has rejected the response. It is our opinion that the response we provided RWQCB adequately defended the statistical approach and, if issues still remain, these should be worked out in technical meetings with RWQCB.

Stanislaus County does not agree that the intrawell approach to determining concentration limits should be abandoned and a new Water Quality Protection Standard Report submitted. The reason for this is that interwell statistics to determine single concentration limits for this site will not work. The natural variability of inorganic constituents in groundwater is considerable for this site, as it is for many sites on the western margins of the San Joaquin Valley. Using widely varying background concentrations to calculate single concentration limits is not appropriate for these conditions because if the concentration limit is high enough to allow for natural background concentrations (as it should be) they will be too high to detect releases from the site at many locations.

Conversely, if the concentration limits are set too low to allow for natural background variability, then there will be consistent exceedences of the concentration limits even though a release has not occurred. Such is the case with the concentration limits in the current Order and in the Tentative Order. Every monitoring well at the site consistently exceeds at least one inorganic concentration limit, for every monitoring event. Even the designated "background" wells exceed the concentration limits. In the first quarter 2008 monitoring event, 13 of 13 wells exceeded at least one inorganic concentration limit even though 12 of the 13 wells contained no VOCs. This is a clear indication that the existing concentration limits are wrong and do not serve their intended purpose to help identify releases from the landfill.

As a further example of this problem, 15 monitoring wells were installed in the proposed expansion area to the Fink Road Landfill during preparation of the Draft EIR. These wells were all installed upgradient of the site (to the west) and could not be influenced by the facility. These wells had the following concentrations (in mg/L):

Chloride: minimum = 16, maximum = 237, average = 69.4
Nitrate as N: minimum = 7.7, maximum = 43, average = 16.3
Sulfate: minimum = 8.8, maximum = 554, average = 108
TDS: minimum = 352, maximum = 1800, average = 675

Keeping in mind that these wells are upgradient and unaffected by the landfill, the wide range of background (natural) values shows why interwell concentration limits will not work. In fact, even the average concentrations in these wells exceed all four concentration limits in the Order.

Again, this is a clear indication that the concentration limits in the Order are incorrect for the facility, as is the interwell approach used for the calculation.

If the RWQCB is rejecting outright the intrawell approach to the site, which does account for spatial variability in background concentrations, then RWQCB is essentially requiring interwell concentration limits, which will not work. If RWQCB is rejecting this approach, it would be helpful to understand staff's rationale for same. If RWQCB is NOT rejecting intrawell concentration limits, then we only need to resolve outstanding details for the intrawell concentration limits already proposed.

Recommendation: The facts stated in paragraph 39 are correct and should remain. However, it is recommended that the language stating that RWQCB has rejected the intrawell approach justification and a new Water Quality Protection Standard Report is required, should be removed. Instead, it is recommended that this paragraph state that intrawell concentration limits have been proposed and the Discharger and RWQCB will work together to resolve outstanding questions on this approach.

WDRs Groundwater Monitoring ¶ 42: This paragraph states that "The Discharger did not install a pan lysimeter or other unsaturated monitoring system at LF-3 Cell 3." This statement is incorrect. Lysimeter LF3C3P (primary) and LF3C3S (secondary) were installed and are shown on Attachment B to the Tentative Order.

Recommendation: Delete this paragraph or amend to a general statement of the requirement.

WDRs Groundwater Monitoring ¶ 45 and 46: These paragraph provide data on both inorganic concentrations in some monitoring wells and the detection of MTBE in monitoring well MW-17. While the data given is materially correct, it omits to say that MTBE, which was detected in only two events in 2006, at a maximum concentration of 0.52 µg/L, has not been detect since December 2006 during five separate monitoring events. The information implies that MTBE in MW-17 is an ongoing issue that needs to be addressed which does not appear to be true. The Discharger has provided RWQCB with a plausible explanation of the two MTBE detections, namely atmospheric deposition of MTBE. This phenomenon has been documented by EPA in studies conducted throughout the country. The fact that the Fink Road Landfill is located next to the major I-5 corridor and in a groundwater recharge area, supports this theory.

Recommendation: Paragraph 45 should acknowledge that while there were two detections of MTBE in 2006, it has not been detected since. Paragraph 46 should be revised to remove the reference to MTBE and the requirement that either the source be identified, or the lateral and vertical extent be defined, for MTBE. It is not possible to identify the source of MTBE if it is not present nor is it possible to define the lateral and vertical extent of something that does not currently exist.

WDRs Provisions ¶ 14: This paragraph requires a liner integrity test for LF3 Cell 3 and the source of increased concentrations of inorganics at MW-17 and MW-20. It also requires the Discharger determine the source of MTBE in MW-17. As discussed in the above comment, this is not currently possible to achieve. If this requirement is included in the Order, as is, the Discharger will be unable to comply because MTBE has only been detected on two occasions in 2006, and has not been detected since during five monitoring events. Again, it is not possible to determine the source of something that does not currently exist.

This paragraph also requires determination of the "source" of increased concentrations of inorganics in MW-17 and MW-20. It is believed that the increases are a result of natural variations in groundwater quality and adjacent land use. The groundwater is present relatively near the land surface in a groundwater recharge area known for high natural salts in the soils. This can lead to changes in groundwater quality with varying precipitation. Over the last 10 years, precipitation has ranged from about four inches per year, to over 18 inches, including a 100-year storm event in 1997. Installing new wells farther from the landfill will not necessarily define this natural variability because the variability is almost certainly not consistent over the area (thus the wide ranging background concentrations).

The paragraph also requires an Evaluation Monitoring Report, Engineering Feasibility Report, and Corrective Action Plan be submitted. This implies that the increases in inorganic concentrations are due to a release from the landfill. If it is determined that these are natural variations, these reports should not be required.

Recommendation: It is recommended that any reference to MTBE and determination of the source of MTBE be removed. It is not possible to determine the source of something that is no longer present. It is also recommended that the specific references to new monitoring wells and locations be removed as these may not be the best locations to determine the cause of inorganic increases. It is recommended that reference to Evaluation Monitoring Report, Engineering Feasibility Study and Corrective Action Plan be removed as these will not be required if it is demonstrated that natural groundwater variability, not a release from the landfill, is the cause of the increases.

WDRs Provisions ¶ 15A: This paragraph requires a Site Investigation Work Plan be submitted to RWQCB by June 30, 2008. This is acceptable to the Discharger. However, any reference to MTBE should be removed since MTBE no longer is present during the last five monitoring events. The Discharger cannot determine the source of something that no longer exists. Also, the requirement for specific well locations should be removed as these will be proposed in the Work Plan, as appropriate.

Recommendation: Remove requirements related to MTBE and remove specific well location requirements.

WDRs Provisions ¶ 15B: This paragraph requires a Site Investigation Report be submitted to RWQCB by September 12, 2008. This provides less than 2½ months after the Work Plan is submitted to contract for the work, retain a driller, install wells, take samples, complete analyses, and prepare the report – and this assumes no time for RWQCB review and approval of the Work Plan. Also, even if this deadline could be met, it would include no more than one sampling set of data. This is insufficient to define groundwater characteristics, including natural and seasonal variations. Since it is believed that increased inorganic concentrations may be a result of natural variability and recharge and adjacent land use changes over time, this deadline would preclude the ability to assess this as a cause.

Recommendation: It is recommended that the deadline be removed and that the Discharger provide quarterly updates to RWQCB, to be included in the quarterly and annual monitoring reports, until such time that the cause can be documented. At that time, all data will be reported in the Site Assessment Report. For reasons already discussed, reference to determining the source of MTBE should also be removed.

WDRs Provisions ¶ 15C: This paragraph requires a Feasibility Study and Corrective Action Plan be submitted by November 14, 2008. For the reasons discussed above, this will not be possible. This is insufficient time to properly evaluate groundwater conditions, including natural and seasonal variability. Also, if it is demonstrated in the Site Assessment Report that the cause for increased organics is <u>not</u> a release from the landfill, then these reports will not be required.

Recommendation: Remove this requirement or state that the Discharger will submit these reports within 60 days of completion of the Site Assessment Report, if it is determined that the cause of the inorganic increases is a release from the landfill.

WDRs Provisions ¶ 16: This requires a new Water Quality Protection Standard Report be submitted by November 28, 2008. The Discharger disagrees with the need for this document. As discussed above, an extensive WQPS Report has already been submitted and RWQCB has not provided a reason why it is being rejected outright. Intrawell statistics is the only approach that will work for this site. If this approach is rejected outright, interwell concentration limits will be the only other option and these have already been proven to be ineffective in determining a release from the landfill.

Recommendation: Remove this requirement. If necessary, state that the Discharger and RWQCB will continue discussions to determine the best statistical approach for this facility and modify, as appropriate, the existing WQPS Report already submitted.

MRP Monitoring, ¶ Surface Water Monitoring: This section describes surface water monitoring for three locations where flow may leave the facility: S-1, S-2 and S-3. As reported in recent quarterly and annual monitoring reports, location S-3 has been reconfigured and no longer is a point of potential offsite discharge. Water in this area is now routed to surface impoundment SI-2. Therefore, it is no longer a surface water monitoring point.

Recommendation: Remove references to S-3 as a surface water monitoring point.

SUMMARY

In summary, we feel that the stated intent of the Order, to allow for treated wood waste disposal, and all the related requirements is appropriate and acceptable. However, the Order goes well beyond the stated intent and requires groundwater investigations and reports that, in many cases, are inappropriate or impossible. The Order needs to be modified to reflect these issues and, if additional groundwater investigations are included in the Order, it should be so stated in the intent. An effective Order is only possible if the requirements of the Order are reasonable and achievable.

County staff and our consultant are willing to meet with RWQCB staff at any mutually agreeable time to discuss the groundwater investigation requirements and concentration limit issues so we can work out acceptable plans, investigations, and meet reasonable deadlines.

Thank you again for the opportunity to comment on the Tentative WDRs/MRP. Do not hesitate to contact me if you have questions. My direct line telephone number is (209) 525-6768.

Regards,

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Assistant Director

Cc: Ron Grider, Stanislaus County
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